3b Thickness of Cenozoic sequence in the Karumba and Kalpowar basins

Abstract	Thickness of Cenozoic sequence in the Karumba and Kalpowar basins overlying the GAB. Data is available as isopachs and raster. Isopachs are in Shapefile format. Rasters are in both ESRI grid and ASCII grid formats. This GIS data set was produced for the Great Artesian Basin Water Resource Assessment and used in: 1. Figure 3.4 of Ransley TR and Smerdon BD (Eds) (2012) Hydrostratigraphy, hydrogeology and system conceptualisation of the Great Artesian Basin. A technical report to the Australian Government from the CSIRO Great Artesian Basin Water Resource Assessment. CSIRO Water for a Healthy Country Flagship, Australia. 2. Figure 5.10 of Smerdon BD, Welsh WD and Ransley TR (Eds) (2012) Water resource assessment for the Carpentaria region. A report to the Australian Government from the CSIRO Great Artesian Basin Water Resource Assessment. CSIRO Water for a Healthy Country Flagship, Australia. This dataset and associated metadata can be obtained from www.ga.gov.au, using catalogue number 76535.
Lineage	Thickness of the Cenozoic sequence in the Karumba and Kalpowar basins interpolated from point thickness values calculated from a variety of sources which include drill-hole and seismic data. Seismic interpretation came from McConachie et.al. (1997). Stratigraphic information came from company well completion reports and BMR and GSQ stratigraphic drilling (references below). SOURCE DATA: Blake, T., I. R. Burgess, et al. (1984). Duyken 1, Well completion report. Permit NT/P 30, Carpentaria Basin, Northern Territory, Australia. Canada Northwest Australia Oil N.L. BMR 84/577. Australia, Bureau of Mineral Resources. Derrington, S. S. (1957). Final report, F. B. H. No.1 (Wyaaba). Company Report 161. Brisbane, Geological Survey of Queensland. Derrington, E. A. and L. J. Williams (1988). GSQ Normanton 1: Preliminary lithologic log and composite log. Record 1988/13. Brisbane, Queensland Department of Mines. Derrington, E. A. (1989). GSQ Rutland Plains 1: Preliminary lithologic log and composite log. Record 1989/19. Brisbane, Queensland Department of Mines. Dunster, J. N. (1992). Jackin Creek 2, Well completion report, Authority to prospect 373P, Carpentaria Basin, Queensland. Company report 23371. Brisbane, Geological Survey of Queensland. Dunster, J. N. (1992). Pennefather-1 Well completion report, Authority to Prospect 373P, Carpentaria Basin, Queensland. Company report 23372. Brisbane, Geological Survey of Queensland. Dunster, J. N., B. A. McConachie, et al. (1989). COM Armraynald 1, Well completion

report, A-P 373P, Carpentaria Basin, Queensland. Company report 20579. Brisbane, Geological Survey of Queensland.

Dunster, J. N., B. A. McConachie, et al. (1989). PRC Beamesbrook 1, Well completion report, A-P 373P, Carpentaria Basin, Queensland. Company report 20566. Brisbane, Geological Survey of Queensland.

Dunster, J. N., B. A. McConachie, et al. (1989). COM Silverleaf 1, Well completion report, A-P 373P, Carpentaria Basin, Queensland. Company report 20581. Brisbane, Geological Survey of Queensland.

Gibson, D. L., B. S. Powell, et al. (1974). Shallow stratigraphic drilling, northern Cape York Peninsula, 1973. Record 1974/76. Australia, Bureau of Mineral Resources

Hardy, J. W. J. (1970). Well completion report, CON Breeza Plains No. 1 and CON Lakefield No. 1, A-P 143P, Queensland. Company Report 3303. Brisbane, Geological Survey of Queensland.

Harrison, J., W. J. Greer, et al. (1961). Completion report, Delhi-Santos Mornington Island Nos 1 and 2 wells. Company Report 696. Brisbane, Geological Survey of Queensland.

Laing, A. C. M. (1958). Final report on AAO Number 8 (Karumba). Mines Administration PL, Brisbane. Company report 226. Brisbane, Geological Survey of Queensland.

McConachie, B. A., J. N. Dunster, et al. (1989). Jackin Creek 1, Well completion report, A-P 373P, Carpentaria Basin, Queensland. Company Report 20580. Brisbane, Geological Survey of Queensland.

McConachie BA, Dunster JN, Wellman P, Denaro TJ, Pain CF, Habermehl MA and Draper JJ 1997 - Chapter 9; Carpentaria lowlands and gulf of Carpentaria regions. In: Bain JHC and Draper JJ (eds.) North Queensland Geology. AGSO Bulletin 240. Queensland department of Mines and Energy Australia, 365-397.

Meyers, N. A. (1969). Carpentaria Basin. GSQ Report 34. Queensland, Geological Survey of Queensland.

Mines Administration Pty Ltd. (1962). Cabot-Blueberry Marina No. 1, Authority to Prospect 61P, Queensland. Well Completion report. Report Q/61P/112. Company report 976. Brisbane, Geological Survey of Queensland.

Perryman, J. C. (1964). Midwood Exploratory Proprietary Ltd., Completion report, Burketown No.1, A-P 91P, Queensland. Company Report 1480. Brisbane, Geological Survey of Queensland.

Raymond, O.L. (2012) Surface Geology of Australia 1:1 million scale dataset 2012 edition. Geoscience Australia. Canberra. (available from http://www.ga.gov.au Catalogue number 74619)

Smart J, Grimes KG, Doutch HF and Pinchin J (1980) The Carpentaria and Karumba Basins, north Queensland. Bulletin 202. Bureau of Mineral Resources, Geology and

	Geophysics, Australia. Williams, L. J. (1976). GSQ Ebagoola 1 – Preliminary lithologic and composite log. Record 1988/14. Brisbane, Queensland Department of Mines and Geological Survey of Queensland. Williams, L. J. and L. M. Gunther (1989). GSQ Dobbyn 1 – Preliminary lithologic and composite log. Record 1989/22. Brisbane, Geological Survey of Queensland. METHOD: Data was imported into ArcGIS as point sets. The isopach value field was used to interpolate a surface using the Topo to Raster tool in the Spatial analyst toolset. Isopachs were generated from the raster using the Contour tool in the 3d analyst toolset in ArcGIS. BOUNDARY: Karumba and Kalpowar basin boundaries were interpreted from the Surface Geology of Australia 1:1 million scale dataset (Raymond, O.L., 2012). Note: boundary used for this data set in Ransley TR and Smerdon BD (Eds) (2012) and Smerdon BD, Welsh WD and Ransley TR (Eds) (2012) is the Great Artesian Basin Water Resource Assessment boundary.
Extent	West 131.7214; East 144.9253; North -7.5910; South -21.5576
Scale	1:6 000 000